

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re App.:	10/565,901)	<u>PATENT APPLICATION</u>
)	
Filing Date:	January 24, 2006)	Art Unit: 1742
)	
Inventor:	Herring)	Examiner: X. Liu
)	
Title:	<i>Method and Apparatus for</i>)	
	<i>Forming a Moulding</i>)	
)	

Customer No.: 28554

REPLY BRIEF TO EXAMINER'S ANSWER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This reply brief is submitted in accordance with 37 C.F.R. §41.41 and M.P.E.P. §1208, in response to the Examiner's Answer.

Status of Claims

The status of claims is the same as described in the Status of Claims section of the Appeal Brief.

Grounds of Rejection To Be Reviewed on Appeal

The statement of the grounds of rejection in the initial Appeal Brief is still accurate. Applicant asserts that the Examiner's Answer does not contain a new ground of rejection.

Arguments

After reviewing the Examiner's Answer, Applicant maintains its assertion that claims 50-55 and 57-84 are patentable over the cited prior art.

Applicant will mainly address the comments made by the Examiner in the section of the Examiner's Answer titled "(10) Response to Argument" found at pages 14-20 of the Examiner's Answer.

1. Claim 50

Applicant asserted that the Examiner has improperly combined the references, namely the combination of *Easterlow* and *Chu*, or the combination of *Easterlow*, *Chu*, and *Kashiwagi*, since the Examiner failed to properly consider the differences between the claim and the references, used impermissible hindsight reasoning, and since the references teach away from each other.

In response, the Examiner acknowledges that *Chu*'s teaching is generally directed to using magnetic force to orient metallic parties in a spray coating process, but argues that *Chu* also teaches that in addition to adding metallic flakes to the coating material, the moulded resinous plastic material of the housing may itself include a plurality of flakes or particles or material mixed therein prior to moulding such that those particles will be visible in the outside surface after moulding for enhancement by the generally transparent coating, and therefore, the combination of *Eastlow* and *Chu* teaches magnetic manipulation of magnetic parties within the mould (see Examiner's Answer, at pp. 15, 18).

However, Applicant respectfully submits that this portion of *Chu* is not considered relevant since the metallic particles in the housing substrate of *Chu* are not manipulated by any magnetic field at all. Because *Chu* only discloses that the moulded housing is formed and set prior to being spray coated and subjected to a magnetic field. Therefore, the metallic particles in the set housing substrate of *Chu* are not able to be oriented by the magnetic field. Indeed, *Chu* does not even seek to re-orient the metallic particles in the moulded housing substrate because these particles are not subject to the problem of poor orientation that is caused by the spraying of metallic particles. *Chu* only relates to the use of a magnetic field for manipulating metallic particles that are poorly oriented due to being sprayed in a spray coating process, and is therefore not relevant to the dual-injection process of *Easterlow*. The combination of *Eastlow* and *Chu* in the manner proposed by the Examiner is thus not proper.

The Examiner disagrees that the references teach away from each other and asserts that the combination of *Eastlow* and *Chu* is to modify the moulding process of *Eastlow* with the magnetic orientation of particles of *Chu*, rather than applying the spray coating technique in the in-moulding coating process of *Eastlow* (see Examiner's Answer, p. 18).

However, as explained in the initial Appeal Brief, Applicant submits that even if one did use the magnetic orientation of particles disclosed in *Chu* to modify the moulding process of *Easterlow* as suggested by the Examiner, the orientation of the metallic flakes in *Easterlow* would not actually be altered since they are already oriented parallel to the surface. As such, the skilled artisan would not be motivated to modify the moulding process of *Eastlow* with the magnetic orientation of particles of *Chu* (see Appeal Brief, at pp. 9-10).

In response, the Examiner asserts that this is not the case, since Applicant's specification discloses that surface appearance of a product produced by dual injection moulding is also affected by weld lines and is highly dependent upon the profile of the inner surface of the mould, and moulds having irregular or discontinuous inner surfaces may cause the flow of the first coating (i.e. paint coating) across the surface of the mould to be distorted. The Examiner further asserts that it would be obvious to one of skill in the art to orient the metallic particles using the magnetic field as disclosed by *Chu* in the method of *Eastlow* in addition to aligning the particles by the flow of the material alone since the magnetic orientation of metallic particles is beneficial such as in forming particular patterns for aesthetic purposes (see Examiner's Answer, at p. 16).

Applicant does not dispute the well-known fact that magnetic particles can be oriented using magnetic force. However, Applicant submits that the Examiner has applied impermissible hindsight reasoning when he has taken known elements from different prior art references and asserted it would be obvious to combine them in light of Applicant's specification.

The present invention recognises that the coating process can be improved by using a dual injection process, and further that the appearance of the moulding does not have to be defined solely by the flow lines in the injection moulding if applying a magnetic field to the metallic flakes within the moulding equipment prior to curing of the layers of the moulding. In contrast, *Eastlow* does not even disclose or suggest that the metallic particles are ferromagnetic particles which can be manipulated by a magnetic field, while *Chu* only relates to the use of a magnetic field for manipulating metallic particles that are poorly oriented due to

being sprayed in a spray coating process, and is therefore not relevant to the dual-injection process of *Easterlow*.

Accordingly, Applicant respectfully submits that the Examiner has improperly combined these references by relying on impermissible hindsight reasoning and further, that upon starting from the disclosure of either of these references, there is no motivation to combine their teachings since *Easterlow* and *Chu* are clearly directed towards alternative techniques as discussed in the initial Appeal Brief.

The Examiner agrees that *Eastlow* does not disclose the use of magnetic particles, but argues that since *Eastlow* teaches metal particles, *Eastlow* would naturally include magnetic particles as well, and therefore, one skilled in the art would have found it obvious to use magnetic particles as opposed to non-magnetic particles in the molding process of *Eastlow* since *Chu* teaches that magnetic particles may be oriented by magnetic fields in a shaped article to give a desired visual effect (*see* Examiner's Answer, at p. 17).

However, Applicant submits that even if *Eastlow*'s metal particles may include magnetic particles as suggested by the Examiner, it is still not obvious for the skilled artisan to modify the dual injection process of *Eastlow* with the magnetic orientation of particles of *Chu*. As discussed in the initial Appeal Brief, there is simply no motivation for the skilled person to apply the teachings from the spray coating process of *Chu* to reorient the metallic flakes in the dual injection process of *Easterlow*. This is because the metallic flakes in *Eastlow* are already well oriented by the dual injection process of *Easterlow* and there is no benefit, and certainly no motivation to use the magnetic field disclosed in *Chu* to modify the dual injection process of *Eastlow* for a desired visual appearance (*see* Appeal Brief, at pp. 8-9). Applicant further submits that the Examiner has not provided any evidence to rebut the showing in Applicant's Appeal Brief.

2. Claims 51, 57, 61, 71-79 and 81-84

The Examiner relied on previous arguments for these claims (*see* Examiner's Answer, at pp. 5-6, pp. 9-11), as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

3. Claims 52-55 and 80

For claim 80, Applicant made two arguments about why claim 80 was patentable. The first argument was that claim 80 was patentable for the same reasons as claim 50. The second argument made by the Applicant is that claim 80 is also patentable over the cited prior art because claim 80 recites additional limitations not taught or suggested by the prior art, alone or in combination.

In response, the Examiner argues that *Spain* was cited to teach a third layer which includes magnetic parties, whereas *Eastlow* in view of *Chu* teaches one of the first and second layers which includes magnetic parties (see Examiner's Answer, at p. 20, emphasis added). However, in the Final Office Action dated 9/11/2009, the Examiner explicitly states: "since the third material that forms the clear coat layer as taught by Spain et al. does not contain any magnetic particles, the third material and the first or second materials clearly comprise different weight percentages." (see Office Action dated 9/11/2009, emphasis added). Clearly, the Examiner has rendered inconsistent readings of *Spain* in rejecting claim 80.

Accordingly, Applicant submits that the Examiner has not overcome the showing in the Appeal Brief (pages 10-11).

4. Claims 58-59 are Patentable

The Examiner relied on previous arguments for these claims (see Examiner's Answer, at p. 11) , as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

5. Claim 60 is Patentable

The Examiner relied on previous arguments for these claims (see Examiner's Answer, at p. 12), as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

6. Claims 62-66 and 68-69 are Patentable

The Examiner relied on previous arguments for these claims (see Examiner's Answer, at pp. 12-13), as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

7. Claim 67 is Patentable

The Examiner relied on previous arguments for these claims (*see* Examiner's Answer, at p. 13), as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

8. Claim 70 is Patentable

The Examiner relied on previous arguments for these claims (*see* Examiner's Answer, at p. 14), as does the Applicant. Applicant asserts that the Examiner has not overcome the showing in the Appeal Brief.

Conclusion

Based on the above, it is respectfully submitted that claims 50-55 and 57-84 are patentable over the cited references, and it is respectfully requested that the rejections of these claims be withdrawn.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 501826 for any matter in connection with this Appeal, including any fee for extension of time, which may be required.

Respectfully submitted,

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